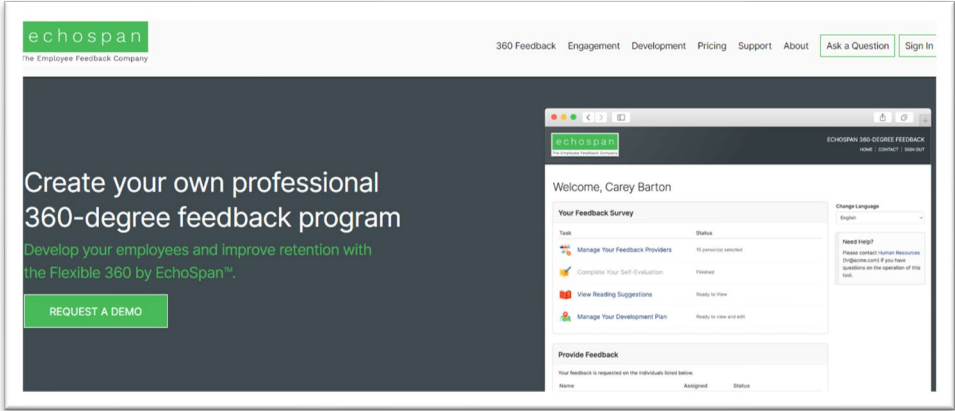
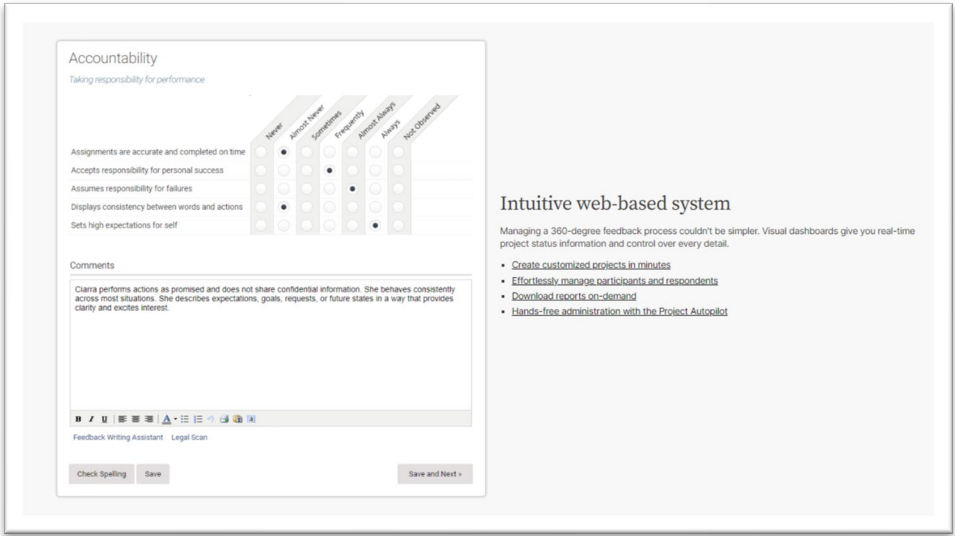
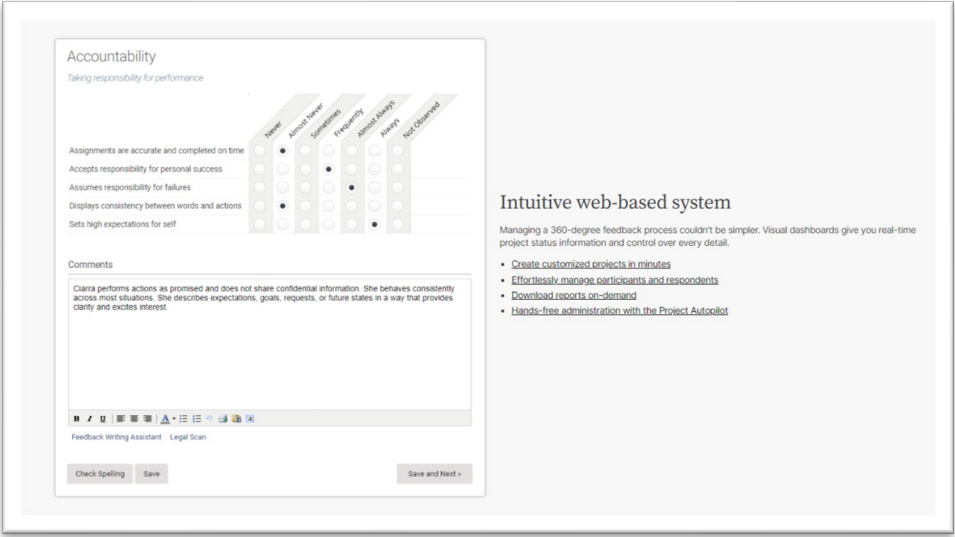
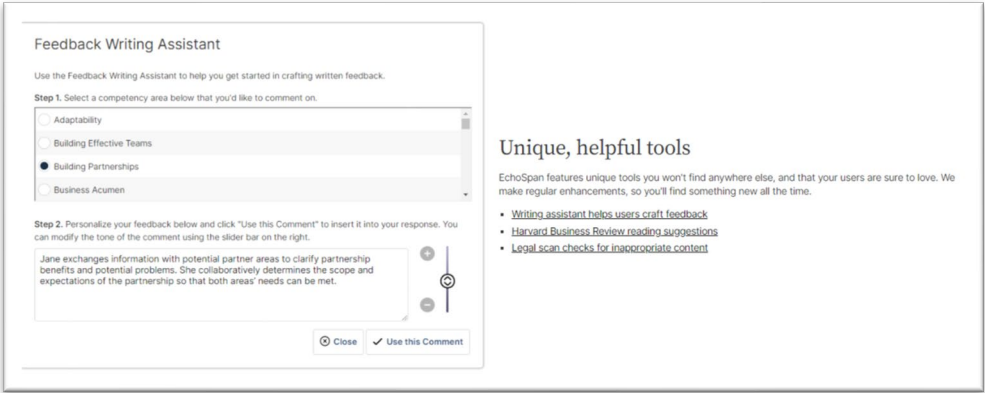


EXHIBIT 2

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

<u>Patent No.</u> <u>10,963,639</u>	<u>EchoSpan 360-degree Feedback Program</u>
<p>1. A computer-implemented method comprising:</p>	<p>EchoSpan's 360-degree feedback program is a web-based (i.e. computer implemented) system.</p>   <p>See https://www.echospan.com/360-degree-feedback.asp.</p>

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

<u>Patent No.</u> <u>10,963,639</u>	<u>EchoSpan 360-degree Feedback Program</u>
<p>[1a] receiving a text input;</p>	<p>EchoSpan's 360-degree feedback program receives text input as shown in the "Comments" and "Step 2" fields below.</p> <div style="display: flex; flex-direction: column; align-items: center;">   </div> <p>See https://www.echospan.com/360-degree-feedback.asp.</p>

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

[1b] evaluating the text input with a first model to determine an initial sentiment and confidence thereof;

EchoSpan's 360-degree feedback program provides sentiment "scores" "on comments."

Major Enhancements

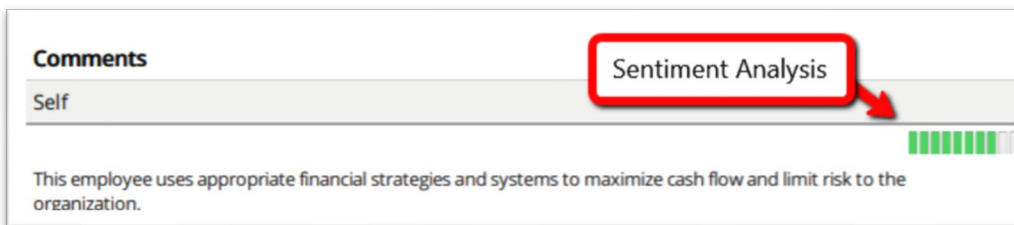
Enhanced Individual Review Items Component: we've combined several popular reporting features into a single, flexible report section that presents individual item results more attractively. Consolidation of features also means you'll shorten your reports; more information is presented in fewer pages. In addition to average scores for individual review items, the enhanced component includes:

- Frequency Distribution metrics displayed as a table or a graph. (P,E)
- Standard Deviation. (E)
- Identification of Hidden Strengths and Blind Spots. (P,E)
- Identification of Highest and Lowest Rated Items. (P,E)
- Comments with automatic translation and sentiment scores. (E)
- Percentiles and quartiles. (E)
- Faster Execution of Report Generation (P,E)

Other Enhancements:

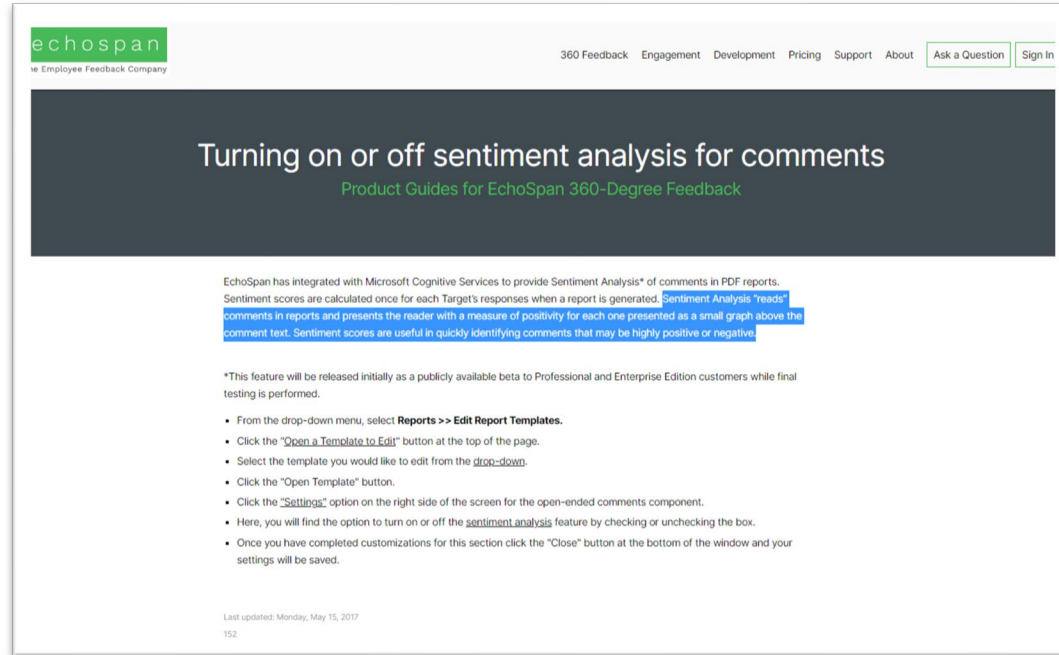
- Allow sentiment analysis on comments appended to individual items section (E)
- Purchase additional rater licenses online (P,E)
- Suppress automatic email to Auditors when Targets submit Rater List for approval (P,E)

See <https://www.echospan.com/articles/release-notes:-version-7.70>.



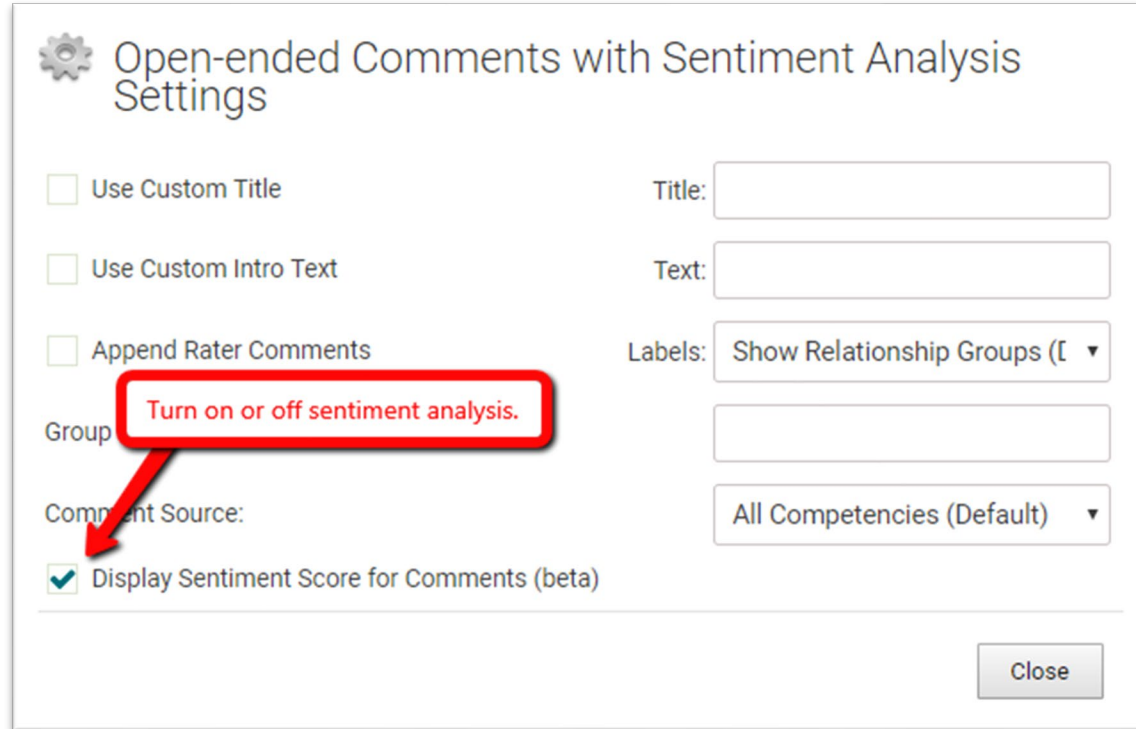
See <https://www.screencast.com/users/KDellinger/folders/Jing/media/fb6c3ada-2e3d-4dbe-8d81-02d98184dd36/embed>.


MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART



See <https://www.echospan.com/product-guides/turning-on-or-off-sentiment-analysis-for-comments>.

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART



 Open-ended Comments with Sentiment Analysis Settings

☐ Use Custom Title Title:

☐ Use Custom Intro Text Text:

☐ Append Rater Comments Labels: Show Relationship Groups (I ▾)

Group

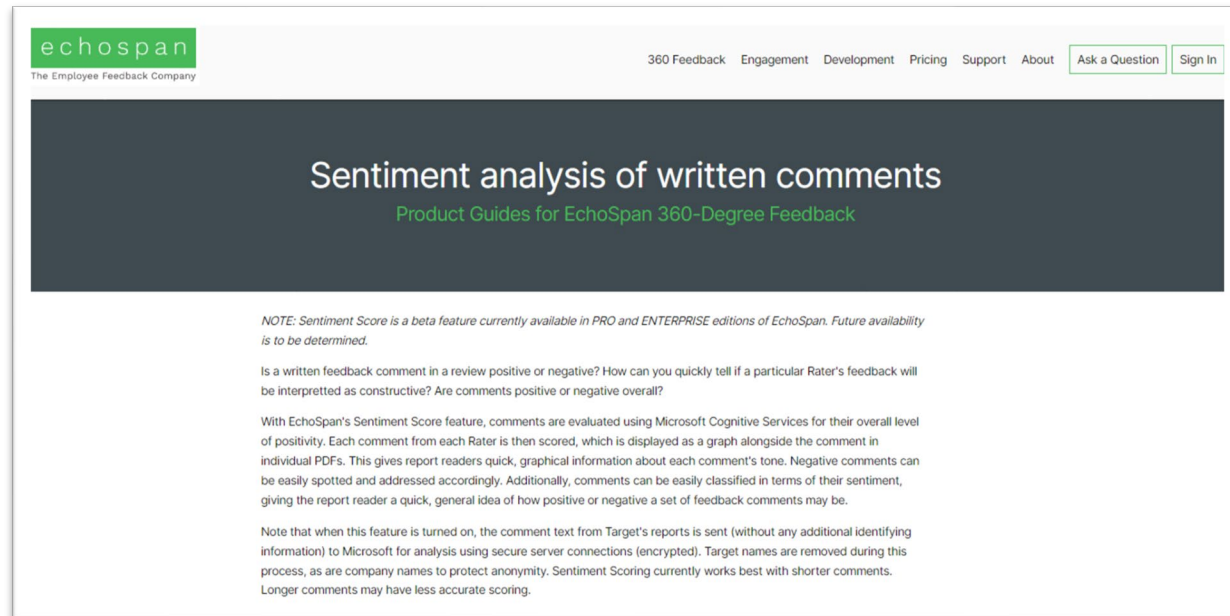
Comment Source:

☒ Display Sentiment Score for Comments (beta)

See https://content.screencast.com/users/AMC3/folders/Jing/media/2a18ada9-5fa6-4431-b7e9-5ed9c5acde83/2017-05-12_1322.png.

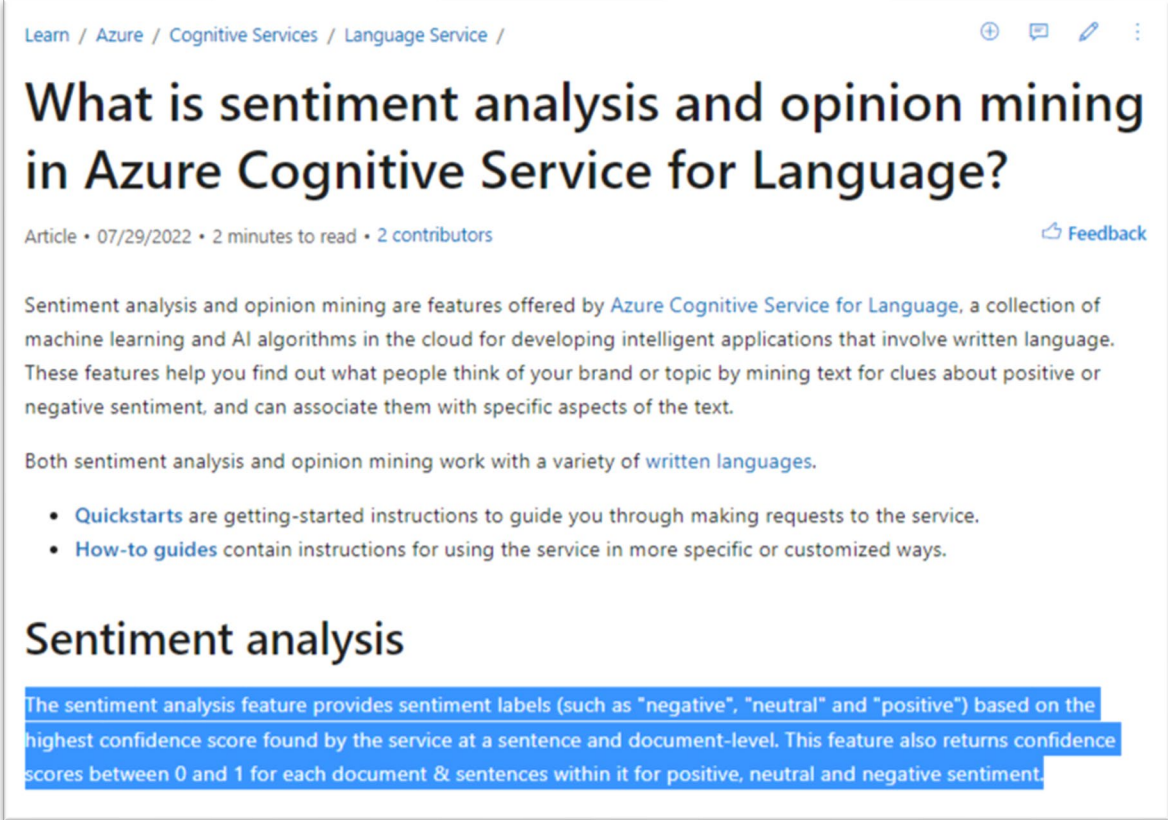
MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

The Sentiment scores are calculated, *inter alia*, by using “Microsoft Cognitive Services.”



See <https://www.echospan.com/product-guide-article.asp?articleid=146&prevarticleid=150>.

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

<u>Patent No.</u> <u>10,963,639</u>	<u>EchoSpan 360-degree Feedback Program</u>
	<p>Microsoft Cognitive Services, now called Azure Cognitive Service for Language, incorporates “confidence scores” within its sentiment analysis.</p>  <p>See https://learn.microsoft.com/en-us/azure/cognitive-services/language-service/sentiment-opinion-mining/overview.</p>

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

[1c] if the confidence exceeds, or is equal to, a threshold, using the initial sentiment;

With Microsoft Cognitive Services, “Confidence scores range from 1 to 0. Scores closer to 1 indicate a higher confidence in the label's classification, while lower scores indicate lower confidence. For each document or each sentence, the predicted scores associated with the labels (positive, negative, and neutral) add up to 1.”

Sentiment Analysis

Sentiment Analysis applies sentiment labels to text, which are returned at a sentence and document level, with a confidence score for each.

The labels are *positive*, *negative*, and *neutral*. At the document level, the *mixed* sentiment label also can be returned. The sentiment of the document is determined below:

Sentence sentiment	Returned document label
At least one positive sentence is in the document. The rest of the sentences are neutral .	positive
At least one negative sentence is in the document. The rest of the sentences are neutral .	negative
At least one negative sentence and at least one positive sentence are in the document.	mixed
All sentences in the document are neutral .	neutral

Confidence scores range from 1 to 0. Scores closer to 1 indicate a higher confidence in the label's classification, while lower scores indicate lower confidence. For each document or each sentence, the predicted scores associated with the labels (positive, negative, and neutral) add up to 1. For more information, see the Responsible AI transparency note.

See <https://learn.microsoft.com/en-us/azure/cognitive-services/language-service/sentiment-opinion-mining/how-to/call-api>.

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

Further, in Microsoft's Cognitive Services, EchoSpan "can choose to use a response only if its confidence score is above a specified confidence score threshold."

Understand confidence scores for sentiment analysis, named entity recognition, language detection, and health functions

The sentiment, named entity recognition, language detection and health functions all return a confidence score as a part of the system response. This is an indicator of how confident the service is with the system's response. A higher value indicates that the service is more confident that the result is accurate. For example, the system recognizes entity of category U.S. Driver's License Number on the text 555 555 555 when given the text "My NY driver's license number is 555 555 555" with a score of .75 and might recognize category U.S. Driver's License Number on the text 555 555 555 with a score of .65 when given the text "My NY DL number is 555 555 555". Given the more specific context in the first example, the system is more confident in its response. In many cases, the system response can be used without examining the confidence score. In other cases, you can choose to use a response only if its confidence score is above a specified confidence score threshold.

See <https://learn.microsoft.com/en-us/legal/cognitive-services/language-service/transparency-note>.

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

<u>Patent No.</u> <u>10,963,639</u>	<u>EchoSpan 360-degree Feedback Program</u>
	<p>EchoSpan, “can adjust the confidence score threshold your system uses to meet your needs.”</p> <div> <p>How to set confidence score thresholds</p> <p>You can choose to make decisions in your system based on the confidence score the system returns. You can adjust the confidence score threshold your system uses to meet your needs. If it is more important to identify all potential instances of the NLP concepts you want, you can use a lower threshold. This means that you may get more false positives but fewer false negatives. If it is more important for your system to recognize only true instances of the feature you're calling, you can use a higher threshold. If you use a higher threshold, you may get fewer false positives but more false negatives.</p> <p>Different scenarios call for different approaches. In addition, threshold values may not have consistent behavior across individual features of Azure Cognitive Service for language and categories of entities. For example, do not make assumptions that using a certain threshold for NER category Phone Number would be sufficient for another NER category, or that a threshold you use in NER would work similarly for Sentiment Analysis. Therefore, it is critical that you test your system with any thresholds you are considering using with real data to determine the effects of various threshold values of your system in the context that it will be used.</p> </div> <p><i>Id.</i> For example, “If it is more important to identify all potential instances of the NLP concepts you want, you can use a lower threshold. This means that you may get more false positives but fewer false negatives. If it is more important for your system to recognize only true instances of the feature you're calling, you can use a higher threshold. If you use a higher threshold, you may get fewer false positives but more false negatives. Different scenarios call for different approaches.” <i>Id.</i></p>

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

[1d] if the confidence is below the threshold, accessing a list including at least one secondary sentiment and evaluating the text input, in combination with each secondary sentiment, with a relevantly similar analysis model to generate a relevantly similar confidence (RSC) score corresponding to each secondary sentiment included in the list, wherein an evaluation of each generated RSC score determines whether to use the initial sentiment or a secondary sentiment as a resolved sentiment; and

“Sentiment analysis and opinion mining are features offered by Azure Cognitive Service for Language, a collection of machine learning and AI algorithms in the cloud for developing intelligent applications that involve written language.”

What is sentiment analysis and opinion mining in Azure Cognitive Service for Language?

Article • 07/29/2022 • 2 minutes to read • 2 contributors

 Feedback

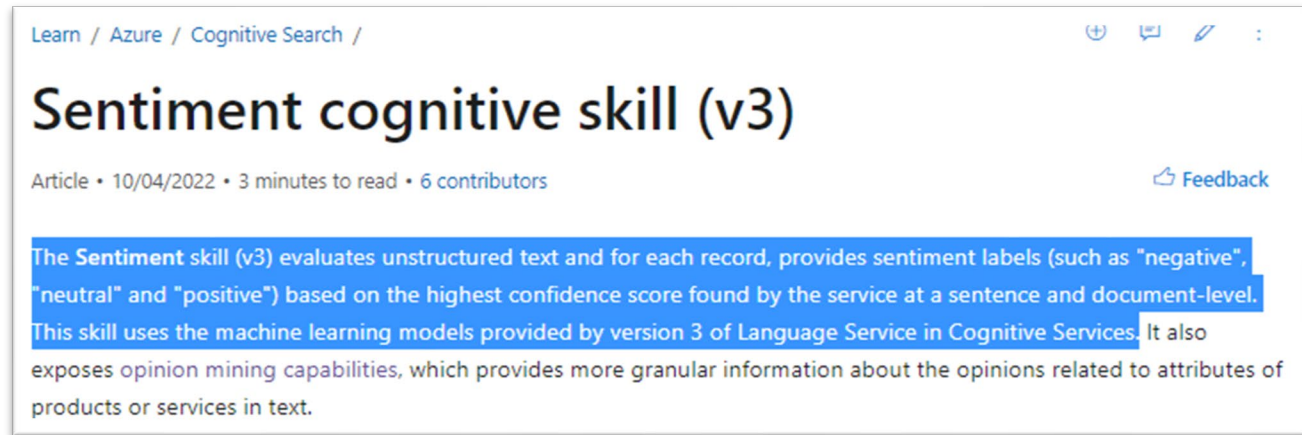
Sentiment analysis and opinion mining are features offered by Azure Cognitive Service for Language, a collection of machine learning and AI algorithms in the cloud for developing intelligent applications that involve written language.

These features help you find out what people think of your brand or topic by mining text for clues about positive or negative sentiment, and can associate them with specific aspects of the text.

See <https://learn.microsoft.com/en-us/azure/cognitive-services/language-service/sentiment-opinion-mining/overview>.

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

“The Sentiment skill (v3) evaluates unstructured text and for each record, provides sentiment labels (such as "negative", "neutral" and "positive") based on the highest confidence score found by the service at a sentence and document-level. This skill uses the machine learning models provided by version 3 of Language Service in Cognitive Services.”



See <https://learn.microsoft.com/en-us/azure/search/cognitive-search-skill-sentiment-v3>.

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

Sentiment analysis utilizes multiple models and selects “sentiment labels ... based on the highest confidence score found” using the multiple models, meaning “if the confidence is below the threshold, accessing a list including at least one secondary sentiment.”

Sentiment analysis

The sentiment analysis feature provides sentiment labels (such as “negative”, “neutral” and “positive”) based on the highest confidence score found by the service at a sentence and document-level. This feature also returns confidence scores between 0 and 1 for each document & sentences within it for positive, neutral and negative sentiment.

See <https://learn.microsoft.com/en-us/azure/cognitive-services/language-service/sentiment-opinion-mining/overview>.

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

Also, "Opinion mining is a feature of sentiment analysis. Also known as aspect-based sentiment analysis in Natural Language Processing (NLP), this feature provides more granular information about the opinions related to words (such as the attributes of products or services) in text."

Opinion Mining

Opinion Mining is a feature of Sentiment Analysis. Also known as Aspect-based Sentiment Analysis in Natural Language Processing (NLP), this feature provides more granular information about the opinions related to attributes of products or services in text. The API surfaces opinions as a target (noun or verb) and an assessment (adjective).

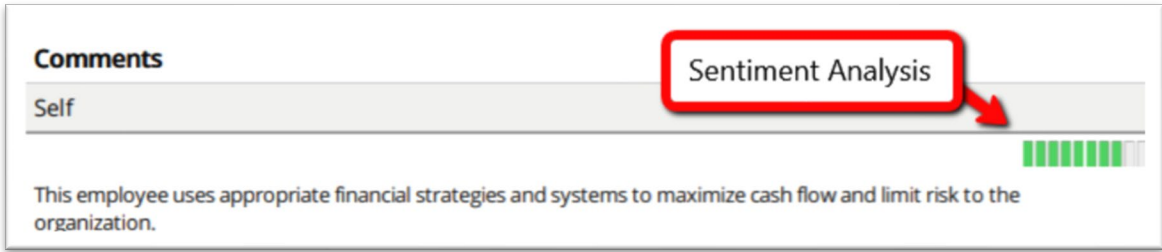
For example, if a customer leaves feedback about a hotel such as "The room was great, but the staff was unfriendly.", Opinion Mining will locate targets (aspects) in the text, and their associated assessments (opinions) and sentiments. Sentiment Analysis might only report a negative sentiment.



If you're using the REST API, to get Opinion Mining in your results, you must include the `opinionMining=true` flag in a request for sentiment analysis. The Opinion Mining results will be included in the sentiment analysis response. Opinion mining is an extension of Sentiment Analysis and is included in your current [pricing tier](#).

See <https://learn.microsoft.com/en-us/azure/cognitive-services/language-service/sentiment-opinion-mining/how-to/call-api>.

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

<u>Patent No.</u> <u>10,963,639</u>	<u>EchoSpan 360-degree Feedback Program</u>
<p>[1e] displaying the resolved sentiment associated with the text string.</p>	<p>EchoSpan's 360-degree feedback program displays the sentiment analysis score associated with the comment.</p>  <p>See https://www.screencast.com/users/KDellinger/folders/Jing/media/fb6c3ada-2e3d-4dbe-8d81-02d98184dd36/embed.</p>

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

<u>Patent No.</u> <u>10,963,639</u>	<u>EchoSpan 360-degree Feedback Program</u>
<p>4. The method of claim 1, wherein when the RSC score is null or less than a threshold, the initial sentiment is set as the resolved sentiment.</p>	<p>The Azure Cognitive Service for Language sentiment analysis selects “sentiment labels ... based on the highest confidence score found,” meaning when one score is null or less than a threshold, the other is set as the resolved sentiment.</p> <div> <p>Sentiment analysis</p> <p>The sentiment analysis feature provides sentiment labels (such as “negative”, “neutral” and “positive”) based on the highest confidence score found by the service at a sentence and document-level. This feature also returns confidence scores between 0 and 1 for each document & sentences within it for positive, neutral and negative sentiment.</p> </div> <p>See https://learn.microsoft.com/en-us/azure/cognitive-services/language-service/sentiment-opinion-mining/overview.</p>

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

<u>Patent No.</u> <u>10,963,639</u>	<u>EchoSpan 360-degree Feedback Program</u>
<p>5. The method of claim 1, wherein when only one RSC score is equal to or greater than a threshold, the secondary sentiment corresponding to that particular RSC score is selected as the resolved sentiment.</p>	<p>The Azure Cognitive Service for Language sentiment analysis selects “sentiment labels ... based on the highest confidence score found,” meaning when only one score is equal to or greater than a threshold, it is selected as the resolved sentiment.</p> <div> <p>Sentiment analysis</p> <p>The sentiment analysis feature provides sentiment labels (such as “negative”, “neutral” and “positive”) based on the highest confidence score found by the service at a sentence and document-level. This feature also returns confidence scores between 0 and 1 for each document & sentences within it for positive, neutral and negative sentiment.</p> </div> <p>See https://learn.microsoft.com/en-us/azure/cognitive-services/language-service/sentiment-opinion-mining/overview.</p>

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

<u>Patent No.</u> <u>10,963,639</u>	<u>EchoSpan 360-degree Feedback Program</u>
<p>6. The method of claim 1, wherein when multiple RSC scores are equal to or greater than a threshold, the method further comprises using the secondary sentiments corresponding to the RSC scores that are equal to or greater than to threshold as input factors to select a tertiary sentiment as the resolved sentiment.</p>	<p>The Azure Cognitive Service for Language sentiment analysis selects “sentiment labels ... based on the highest confidence score found,” meaning using the sentiment corresponding to the scores that are equal to or greater than to threshold as input factors to select a tertiary sentiment as the resolved sentiment.</p> <div> <p>The screenshot shows a title 'Sentiment analysis' followed by a paragraph: 'The sentiment analysis feature provides sentiment labels (such as "negative", "neutral" and "positive") based on the highest confidence score found by the service at a sentence and document-level. This feature also returns confidence scores between 0 and 1 for each document & sentences within it for positive, neutral and negative sentiment.' The words 'sentiment labels (such as "negative", "neutral" and "positive")' and 'based on the highest confidence score found' are highlighted in blue.</p> </div> <p>See https://learn.microsoft.com/en-us/azure/cognitive-services/language-service/sentiment-opinion-mining/overview.</p>

MEDALLIA'S PRELIMINARY INFRINGEMENT CLAIM CHART

<u>Patent No.</u> <u>10,963,639</u>	<u>EchoSpan 360-degree Feedback Program</u>
<p>11. The method of claim 1, wherein the input text is a limited text input.</p>	<p>EchoSpan's 360-degree feedback program receives text input as shown in "Step 2" of a Feedback Writing Assistant that limits the text input.</p> <div> </div> <p>Unique, helpful tools</p> <p>EchoSpan features unique tools you won't find anywhere else, and that your users are sure to love. We make regular enhancements, so you'll find something new all the time.</p> <ul style="list-style-type: none"> • Writing assistant helps users craft feedback • Harvard Business Review reading suggestions • Legal scan checks for inappropriate content <p>See https://www.echospan.com/360-degree-feedback.asp.</p>